

CEEC-ED

DEPARTMENT OF THE ARMY  
U. S. Army Corps of Engineers  
Washington, D. C. 20314-1000

EM 1110-2-3104

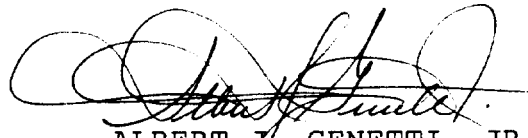
Engineer Manual  
No. 1110-2-3104

30 June 1989

Engineering and Design  
STRUCTURAL AND ARCHITECTURAL DESIGN OF PUMPING STATIONS

1. Purpose. The purpose of this manual is to present the primary features common to pumping station facilities intended for interior drainage on civil works flood protection projects and to present guidance for their architectural and structural design. Much of this guidance is general in nature with liberal reference to appropriate Corps manuals and other design guides. However, specific design guidance is provided for areas involving loading or other factors unique to pumping station structures.
2. Applicability. This manual applies to all HQUSACE/OCE elements and field operating activities having civil works responsibilities.
3. Discussion. EM 1110-2-3105, Mechanical and Electrical Design of Pumping Stations, dated 10 December 1962, is being revised and is scheduled for completion in FY 90. A formed suction intake will be incorporated in the revised EM 1110-2-3105. The formed suction intake has not been incorporated in this EM.

FOR THE COMMANDER:



ALBERT J. GENETTI, JR.  
Colonel, Corps of Engineers  
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This manual supersedes EM 1110-2-3103 dated 29 February 1960 and EM 1110-2-3104 dated 9 June 1958.